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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,714	02/05/2002	Haim Ben-Ari	UTL 00123	1951

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EXAMINER	
KIM, WESLEY LEO	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/072,714	BEN-ARI, HAIM	
	Examiner	Art Unit	
	Wesley L. Kim	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 March 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,6-12 and 17-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,6-12 and 17-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Response to Amendment

This Office Action is in response to Amendment filed on 3/6/06.

Claims 2,4-5,9, and13-16 are cancelled.

Claims 1, 7, 8, 10, 18, 20 are currently amended.

Claims 23-28 are newly added.

Claims 1, 3, 6-12, and 17-28 are pending in the current Office Action.

Response to Arguments

Applicant's arguments filed 3/6/06 have been fully considered but they are not persuasive.

- The applicant alleges that Ghaem fails to teach or suggest "fixedly aligning the reference axis with the screen axis, displaying the reference axis on the display screen, and displaying a direction associated with the reference axis on the display screen."

  The examiner respectfully disagrees. fixedly aligning the reference axis with the screen axis (Col.3;29-33 and Col.4;10-17, screen axis is fixedly aligned with a predetermined compass heading true north, i.e. reference axis 21); displaying the reference axis on the display screen (Fig.1;21 and Fig.1;22, the N-S, E-W lines are displayed on the display screen); and displaying a direction

associated with the reference axis on the display screen (Fig.1;19, direction is associated with the reference axis).

The examiner interprets fixedly aligned to mean that there is some sort of fixed relationship between the reference axis and the screen axis, i.e. the reference axis only rotates as the screen axis rotates to maintain the alignment. Also see (Ghaem, Col.4;10-17), which further supports the examiners position.

- The applicant alleges that the reference axis (i.e. vector 21) of Ghaem is not fixedly aligned with screen axis (i.e. major axis 18), but rather is free to move independently of major axis 18.

The examiner respectfully disagrees. See (Ghaem, Col.4;10-17), which further supports the examiners position. The examiner believes that there is a relationship between the alignment of the reference axis and the screen axis, that relationship being a fixed relationship/alignment. This is true because the reference axis only rotates as the screen axis rotates to maintain the alignment. The examiner has interpreted the claims (i.e. fixedly aligning) in light of the specification (See U.S. Pub. 2003/0148772 A1, Abstract lines 13-16).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1, 6, 11-12, 17, and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al (U.S. Patent 6430498 B1) in view of Ghaem et al (U.S. Patent 5146231).

Regarding Claims 1 and 12, Maruyama teaches a mobile wireless communications device including a display screen (Fig.1, mobiles have display), a method for presenting a direction (Col.5;25-29 and Fig.1, mobiles present a direction) and determining the magnetic bearing of the wireless communication device (Col.5;51-53, magnetic bearing, i.e. location, of device is determined and displayed); however Maruyama **is silent on** selecting a reference axis having a predetermined relationship to the magnetic bearing; fixedly aligning the reference axis with the screen axis; displaying the reference axis on the display screen; and displaying a direction associated with the reference axis on the display screen.

Ghaem teaches a mobile electronic device with direction finding capabilities, which is in the same field of endeavor as Maruyama. Ghaem teaches selecting a reference axis having a predetermined relationship to the magnetic bearing (Fig.1;21 and Fig.1;22, the N-S, E-W lines are chosen as the reference axes and it is obvious that those reference axes have a predetermined relationship to the magnetic bearing of any object located on the planet); fixedly aligning the reference axis with the screen axis (Col.3;29-33 and Col.4;10-17, screen axis is fixedly aligned with a predetermined compass heading true north, i.e. reference axis 21); displaying the reference axis on the display screen (Fig.1;21 and Fig.1;22, the N-S, E-W lines are displayed on the display screen); and displaying a direction associated with the

reference axis on the display screen (Fig.1;19, direction is associated with the reference axis). To the examiner it would be obvious to combine Maruyama with Ghaem since both are teaching a mobile electronic device with direction finding capabilities and although Maruyama does not teach all the limitations as recited in claim 1, Ghaem teaches the remaining limitations and so it is obvious that those other limitations are well known in the art and it would be obvious to incorporate those teachings into the mobile electronic device of Maruyama to assist the user in finding a destination.

To one of ordinary skill in the art, it would have been obvious to modify Maruyama with Ghaem, since they are from similar search areas, viz. presenting a direction based on the current location in a mobile electronic device, such that a reference axis having a predetermined relationship to the magnetic bearing is selected; fixedly aligning the reference axis with the screen axis; displaying the reference axis on the display screen; and displaying a direction associated with the reference axis on the display screen, to provide a method of pointing the user in the direction of the destination and providing supplemental navigational information that a user may find useful to reach a destination.

Regarding Claims 6 and 17, the combination as discussed above teaches all the limitations as recited in claims 1 and 12, respectively, and Maruyama further teaches receiving global positioning system (GPS) location information (Col.4;6-10); receiving map information (Col.1;32-37, it is known map information can be received/downloaded); and, displaying a map display responsive to the map

information (Col.1;35-37, it is possible to show the users present place on a map which was received), showing the wireless communications device location on the map (Col.1;35-37 and Col.6;57-61, the black dot represents the location of the wireless device).

Regarding Claims 11 and 22, the combination as discussed above teaches all the limitations as recited in claims 1 and 12, respectively, and Ghaem further teaches the magnetic bearing of the wireless communications device includes correcting the magnetic bearing with respect to true North (Col.3;30-33).

Regarding Claim 23, the combination as discussed above teaches all the limitations as recited in claim 1, and Maruyama further teaches the direction displayed corresponds with the direction the wireless communication is pointing (Fig.1;12, Fig.1;13, and Fig.1;14).

Regarding Claims 26 and 28, the combination as discussed above teaches all the limitations as recited in claim 1 and 12, respectively, and Ghaem further teaches the direction is displayed in degrees (Col.4;66-Col.5;4).

Regarding Claims 24-25 and 27, the combination as discussed above teaches all the limitations as recited in claims 1, 1, and 12, respectively, however the combination **is silent on** the direction is displayed in quadrants and sub-quadrants.

The examiner takes **Official Notice** that it is well known in the art that a direction can be displayed in quadrants and sub-quadrants. To one of ordinary skill in the art, it would have been obvious to modify the combination as discussed above, such that the direction is displayed in quadrants and sub-quadrants, to

provide to the user a method of displaying the directions in a format that they are most comfortable with, i.e. quadrants, sub-quadrants, or degrees.

2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al (U.S. Patent 6430498 B1) and Ghaem et al (U.S. Patent 5146231) in further view of Farine (U.S. Patent 6185157 B1).

Regarding Claim 3, Maruyama and Ghaem teach all the limitations as recited in claims 1, however the combination **is silent on** the reference axis points to magnetic North.

Farine teach that it is well known in the art to use a reference axis which points to magnetic north to determine a target destination from a source location (Col.1;1-17).

To one of ordinary skill in the art, it would have been obvious to modify Maruyama and Ghaem with Farine, since they deal with providing a direction from the current location of the GPS receiver to a target destination, such that the reference axis points to magnetic North, to provide a reference point when a person is navigating unknown terrian so as to not get lost.

3. Claims 7-8 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al (U.S. Patent 6430498 B1) and Ghaem et al (U.S. Patent 5146231) in further view of Johnson (U.S. Patent 6366856 B1).

Regarding Claims 7 and 18, Maruyama and Ghaem teach all the limitations as recited in claims 6 and 17, respectively, and Ghaem further teaches of a screen axis 18, and if desired a permanent indication of the axis can be applied to the

housing but it doesn't have to be present (Col.3;43-49). To one of ordinary skill in the art, it is obvious that there exists a screen axis, however the combination **is silent on** rotating the map display in response to the rotation of the screen axis.

Johnson teaches rotating a map display in response to the rotation of the mobile phone (i.e. rectangular phone) (Fig.2A-D, map rotates as user turns).

To one of ordinary skill in the art, it would have been obvious to modify, Maruyama and Ghaem with Johnson, since they are from similar search areas, viz. presenting a map based on the current location in a mobile electronic device, such that the map display is rotated in response to the rotation of the screen axis, to provide a method of orienting the map in such a way that what is directly in front of the user will be on the top of the display, thus a more intimate interactive relationship is improved and the map more readily beneficial to the user.

Regarding Claims 8 and 19, the combination as discussed above teaches all the limitations as recited in claims 7 and 18, respectively, and Maruyama further teaches the direction displayed corresponds with the direction the wireless communication device is moving (Fig.1;12, Fig.1;13, and Fig.1;14, the direction displayed corresponds with the direction the wireless communication device is moving).

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al (U.S. Patent 6430498 B1), Ghaem et al (U.S. Patent 5146231), and Johnson (U.S. Patent 6366856 B1) in further view of Atsushi (JP 10-133568) and Irie et al (U.S. Pub 2001/0007090 A1).

Regarding Claim 10, Maruyama, Ghaem, and Johnson teach all the limitations as recited in claim 8, however the combination **is silent on** displaying a magnetic bearing icon on the map.

Atsushi teaches that the map of a navigation system rotates as its screen axis turns (i.e. monitor turns).

Irie teaches displaying the magnetic bearing of the screen axis (Fig.7;212 and Par.81;7-8, bearing mark of the map 212). To the examiner it is obvious that the car (i.e. screen axis) is traveling north, therefore the bearing mark displays an icon pointing North (Fig.7;212). If the car were to turn (i.e. monitor turns) the map would reorient itself such that the top of the display shows what is directly in front of the vehicle and so the bearing mark icon would also adjust to display a bearing representative of the screen axis. Although Atsushi and Irie deals with displaying maps for navigation in a vehicle, one of ordinary skill in the art would find it obvious to apply the navigational aspects (i.e. rotating map and icon displaying bearing of screen axis) of Atsushi and Irie (i.e. navigation device in a car), which are well known in the art, into another navigational electronic device (i.e. navigation in a mobile communications device).

To one of ordinary skill in the art it would have been obvious to modify, Maruyama, Ghaem, and Johnson with Atsushi and Irie, such that the magnetic bearing of the screen axis is displayed, to provide the user with an idea of which direction they are moving with respect to the reference axis.

5. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al (U.S. Patent 6430498 B1) and Ghaem et al (U.S. Patent 5146231) in further view of Atsushi (JP 10-133568) and Irie et al (U.S. Pub 2001/0007090 A1).

Regarding Claims 10 and 20-21, Maruyama and Ghaem teach all the limitations as recited in claims 6 and 17, respectively, and Ghaem further teaches the wireless communications device includes a display screen with a screen axis (Fig.1;20, display screen, Fig.1;18, screen axis is displayed); wherein displaying the reference axis includes: fixedly aligning the reference axis with the screen axis (Col.3;29-33, screen axis is fixedly aligned with a predetermined compass heading true north, i.e. reference axis 21), and Maruyama teaches showing the wireless communications device location on the map (Col.1;35-37 and Col.6;57-61, the black dot represents the location of the wireless device), however the combination **is silent on** displaying the magnetic bearing of the screen axis.

Ghaem teaches of a screen axis 18, and if desired a permanent indication of the axis can be applied to the housing but it doesn't have to be present (Col.3;43-49). To one of ordinary skill in the art, it is inherent that there exists a screen axis.

Atsushi teaches that the map of a navigation system rotates as its screen axis turns (i.e. monitor turns).

Irie teaches displaying the magnetic bearing of the screen axis (Fig.7;212 and Par.81;7-8, bearing mark of the map 212). To the examiner it is obvious that the car (i.e. screen axis) is traveling north, therefore the bearing mark displays an icon pointing North (Fig.7;212). If the car were to turn (i.e. monitor turns) the map would

reorient itself such that the top of the display shows what is directly in front of the vehicle and so the bearing mark icon would also adjust to display a bearing representative of the screen axis. Although Shibuya and Irie deal with displaying maps for navigation in a vehicle, one of ordinary skill in the art would find it obvious to apply the navigational aspects (i.e. rotating map and icon displaying bearing of screen axis) of Atsushi and Irie (i.e. navigation device in a car) into another navigational electronic device (i.e. navigation in a mobile communications device).

To one of ordinary skill in the art it would have been obvious to modify, Maruyama and Ghaem with Atsushi and Irie, such that the magnetic bearing of the screen axis is displayed, to provide the user with an idea of which direction they are moving with respect to the reference axis.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley L. Kim whose telephone number is 571-272-7867. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WLK

GEORGE ENG
SUPERVISORY PATENT EXAMINER